

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

|                               |   |                              |
|-------------------------------|---|------------------------------|
| LG. PHILIPS LCD CO., LTD.,    | ) |                              |
|                               | ) |                              |
| Plaintiff,                    | ) | C.A. No. 05-292 (JJF)        |
|                               | ) |                              |
| v.                            | ) | <b>DEMAND FOR JURY TRIAL</b> |
|                               | ) |                              |
| TATUNG COMPANY; TATUNG        | ) |                              |
| COMPANY OF AMERICA, INC.;     | ) | <b>-REDACTED-</b>            |
| CHUNGHWA PICTURE TUBES, LTD.; | ) | <b>PUBLIC VERSION</b>        |
| AND VIEWSONIC CORPORATION,    | ) |                              |
|                               | ) |                              |
| Defendants.                   | ) |                              |
|                               | ) |                              |

**DEFENDANTS' REPLY BRIEF IN SUPPORT OF RENEWED  
MOTION FOR JUDGMENT AS A MATTER OF LAW OR,  
IN THE ALTERNATIVE, A NEW TRIAL**

OF COUNSEL:

Teresa M. Corbin  
Glenn W. Rhodes  
Howrey LLP  
525 Market Street, Suite 3600  
San Francisco, California 94105  
(415) 848-4900

Julie S. Gabler  
Howrey LLP  
550 South Hope Street, Suite 1100  
Los Angeles, California 90071  
(213) 892-1800

Robert W. Whetzel (#2288)  
whetzel@rlf.com  
Steven J. Fineman (#4025)  
fineman@rlf.com  
Matthew W. King (#4566)  
king@rlf.com  
Richards, Layton & Finger  
One Rodney Square, P.O. Box 551  
Wilmington, DE 19899  
(302) 651-7700  
Attorneys for Defendants/Counterclaimants  
Tatung Company, Tatung Company of  
America, Chunghwa Picture Tubes, Ltd, and  
ViewSonic Corporation

Dated: October 30, 2006

## TABLE OF CONTENTS

|  | Page |
|--|------|
| TABLE OF AUTHORITIES .....   | iii  |
| INTRODUCTION .....   | 1    |
| ARGUMENT .....   | 1    |
| I.    THE EVIDENCE FAILS TO SUPPORT AN INFRINGEMENT FINDING.....   | 1    |
| A.    LPL Fails To Rebut That Infringement Under The Doctrine Of<br>Equivalents Is Unsupported And Contrary To Law. ....   | 1    |
| 1.    Under The Doctrine Of Equivalents <i>Conductors</i> Cannot Be<br>Expanded To Cover <i>Semiconductors</i> .....   | 2    |
| 2.    “Interconnecting” Is Not Entitled To A Range Of Equivalents<br>That Would Ensnare The Prior Art.....   | 2    |
| a. <i>Okawa</i> Shows The Use Of Diodes To Connect Gate<br>Lines And Source Lines To A Guard Ring.....   | 3    |
| b.    LPL’s “Conduction Band” Argument To Distinguish<br><i>Okawa</i> ’s Diodes And CPT’s Diodes In Implementing<br>Its Guard Ring Technology Is A Distinction Without A<br>Difference. .... | 3    |
| 3.    CPT’s Accused Processes Do Not Meet The “Interconnecting”<br>Limitation Under The Doctrine Of Equivalents<br>Function/Way/Result Test. ....  | 4    |
| a.    CPT’s Process Does Not Perform A Required Function<br>Of The Interconnecting Limitation. ....  | 4    |
| (1)    CPT’s Accused Processes Lack The Two-Point<br>Testing Function. ....  | 5    |
| (2)    LPL Misled The Jury Into Ignoring The Testing<br>Function. ....   | 7    |
| b.    CPT’s Accused Products Perform The ESD Dispersion<br>Function Of The Interconnecting Element In A<br>Different Way Than The Patent Teaches.....  | 8    |

|   |    |
|---|----|
| 4. There Can Be No Infringement Even If The “Function, Way, Result” Test Is Not Used To Guide The Insubstantial Difference Inquiry..... | 10 |
| B. The “Via a Resistance” Limitation Of Claims 1 and 8 Are Not Met By CPT’s Accused Process.....  | 11 |
| II. INVALIDITY.....   | 13 |
| A. The <i>Okawa</i> Reference Anticipates Claim 1.....  | 14 |
| 1. <i>Okawa</i> Teaches Using Diodes Like Those In CPT’s Products.....  | 14 |
| 2. <i>Okawa</i> Teaches The Removal Of The Outer Guard Ring.....  | 14 |
| B. The <i>Kawamura</i> Reference Anticipates Claim 1.....   | 15 |
| 1. <i>Kawamura</i> Is Prior Art.....  | 15 |
| 2. <i>Kawamura</i> Employs Removable Outer Guard Rings.....   | 17 |
| C. Claim 8 Is Obvious.....  | 17 |
| 1. It Would Have Been Obvious To Combine Inner And Outer ESD Guard Rings.....   | 17 |
| 2. LPL’s Secondary Considerations Of Non-Obviousness Do Not Apply.....  | 18 |
| CONCLUSION.....   | 19 |

## TABLE OF AUTHORITIES

## CASES

|   |    |
|---|----|
| <i>ATD Corp. v. Lydall, Inc.</i> ,<br>159 F.3d 534 (Fed. Cir. 1998).....                                    | 5  |
| <i>Alacritech, Inc. v. Microsoft Corp.</i> ,<br>No. 04-03284, 2005 WL 850729 (N.D. Cal. Apr. 12, 2005)..... | 7  |
| <i>Applera Corp. v. Micromass UK Ltd.</i> ,<br>204 F. Supp. 2d 724 (D. Del. 2002).....                      | 15 |
| <i>Burroughs Wellcome Co. v. Barr Lab., Inc.</i> ,<br>40 F.3d 1223 (Fed. Cir. 1994).....                    | 15 |
| <i>Celeritas Techs., Ltd. v. Rockwell Int'l. Corp.</i> ,<br>150 F.3d 1354 (Fed. Cir. 1998).....             | 14 |
| <i>Cross Med. Prod., Inc. v. Medtronic Sofamor Danek, Inc.</i> ,<br>424 F.3d 1293 (Fed. Cir. 2005).....     | 10 |
| <i>Freedman Seating Co. v. Am. Seating Co.</i> ,<br>420 F.3d 1350 (Fed. Cir. 2005).....                     | 2  |
| <i>Gamma-Metrics Inc. v. Scantech Ltd.</i> ,<br>52 U.S.P.Q. 2d 1578 (S.D. Cal. 1998).....                   | 16 |
| <i>Helifix Ltd. v. Blok-Lok, Ltd.</i> ,<br>208 F.3d 1339 (Fed. Cir. 2000).....                              | 14 |
| <i>Insituform Techs., Inc. v. Cat Contracting, Inc.</i> ,<br>161 F.3d 688 (Fed. Cir. 1998).....             | 9  |
| <i>Lighting World, Inc. v. Birchwood Lighting, Inc.</i> ,<br>382 F.3d 1354 (Fed. Cir. 2004).....            | 10 |
| <i>Mahurkar v. C.R. Bard, Inc.</i> ,<br>79 F.3d 1572 (Fed. Cir. 1996).....                                  | 15 |
| <i>Nystrom v. Trex Co.</i> ,<br>424 F.3d 1136 (Fed. Cir. 2005).....   | 7  |
| <i>Ormco Corp. v. Align Tech., Inc.</i> ,<br>463 F.3d 1299 (Fed. Cir. 2006).....                            | 18 |

|  |      |
|--|------|
| <i>Procter &amp; Gamble Co. v. Nabisco Brands, Inc.,</i><br>711 F. Supp. 759 (D. Del. 1989).....                             | 6    |
| <i>Sperry Rand Corp. v. Texas Instrs. Inc.,</i><br>206 F. Supp. 676 (N.D. Tex. 1962) .....                                   | 2    |
| <i>Standard Havens Prods., Inc. v. Gencor Indus., Inc.,</i><br>953 F.2d 1360 (Fed. Cir. 1991).....                           | 14   |
| <i>TI Group Automotive Systems (N.A.), Inc. v. VDO N.A., L.L.C.,</i><br>No. 00-432-GMS, 2002 WL 31051602 (D. Del. 2002)..... | 7    |
| <i>Telemac Cellular Corp. v. Topp Telecom, Inc.,</i><br>247 F.3d 1316 (Fed. Cir. 2001).....                                  | 6    |
| <i>Toro Co. v. White Consolidated Indus., Inc.,</i><br>266 F.3d 1367 (Fed. Cir. 2001).....                                   | 6    |
| <i>Vehicular Techs. v. Titan Wheel Int'l, Inc.,</i><br>212 F.3d 1377 (Fed. Cir. 2000).....                                   | 5, 6 |
| <i>Warner-Jenkinson Co. v. Hilton Davis Chem. Co.,</i><br>520 U.S. 17 (1997).....  | 10   |

## INTRODUCTION

Defendants' (collectively "CPT's") Reply Brief addresses the errors contained in LPL's Answering Brief and explains why CPT's requested relief should be granted.

## ARGUMENT

### **I. THE EVIDENCE FAILS TO SUPPORT AN INFRINGEMENT FINDING.**

Two claim limitations are at issue. The first is the "interconnecting" limitation. The second is the "via a resistance" limitation. Neither limitation is met by CPT's accused processes.

#### **A. LPL Fails To Rebut That Infringement Under The Doctrine Of Equivalents Is Unsupported And Contrary To Law.**

Only the "interconnecting" element was subject to Doctrine of Equivalents evidence during trial. Under the Court's claim construction order "interconnecting" is defined as "electrically connecting with conductors." Given the result, the jury must have rejected LPL's assertion that "semiconductors" are "conductors." As discussed below, LPL has failed to rebut CPT's showing that the "interconnecting" limitation is not entitled to an equivalents finding based on CPT's accused processes that use semiconductors (diodes) to connect source lines and gate lines to a guard ring. The bases, each of which undercuts a finding of infringement under the Doctrine of Equivalents, are generally as follows:

- Semiconductors and conductors are different classes of materials and LPL cannot recapture an unclaimed category.
- Semiconductors to connect source and gate lines to a guard ring were known in the prior art prior to Mr. Holmberg's invention and as such LPL is not entitled to a range of equivalents that would ensnare the prior art.

**REDACTED** do not meet the function/way/result test, or the insubstantial differences test, under a Doctrine of Equivalents analysis.

Any of these reasons supports CPT's requested relief.

**1. Under The Doctrine Of Equivalents *Conductors* Cannot Be Expanded To Cover Semiconductors.**

---

Allowing the asserted claims to cover the **REDACTED** would impermissibly recapture an unclaimed category. (LPL brief at 21.) There are three categories of electrical materials: conductors, semiconductors and insulators. (Trial tr.<sup>1</sup> at 491:3-11; 1403:19-1404:1.)<sup>2</sup> Under the Court's order, the "interconnection" limitation is limited to "electrically connecting with *conductors*." (D.I. 218.) LPL incorrectly contests CPT's reliance on *Freedman Seating Co. v. America Seating Co.*, 420 F.3d 1350 (Fed. Cir. 2005). The *Freedman Seating* case, however, refused, in a similar situation, to permit the Doctrine of Equivalents to expand the claim scope of a non-claimed category of materials. 420 F.3d at 1361. To allow recapture of a category not claimed would completely vitiate the claim limitation. *Id.* LPL's assertions to the contrary are incorrect.

**2. "Interconnecting" Is Not Entitled To A Range Of Equivalents That Would Ensnare The Prior Art.**

---

Conductors cannot be expanded to cover what is in the prior art under the Doctrine of Equivalents. LPL's Answering Brief makes several assertions regarding what the evidence supports in terms of what is contained in the prior art and what can be encompassed within Claims 1 and 8 of the '002 patent. To put LPL's arguments in context, it should be remembered that Mr. Holmberg is not the inventor of TFT guard ring technology and certainly did not originate the use of diodes to connect source lines and gate lines to a guard ring. The prior art presented by CPT at trial – *Okawa, Kawamura, Orito* and *Yudasaka* – all show the prior use of guard rings to protect TFT arrays from electrostatic discharge ("ESD"). *Okawa* and

---

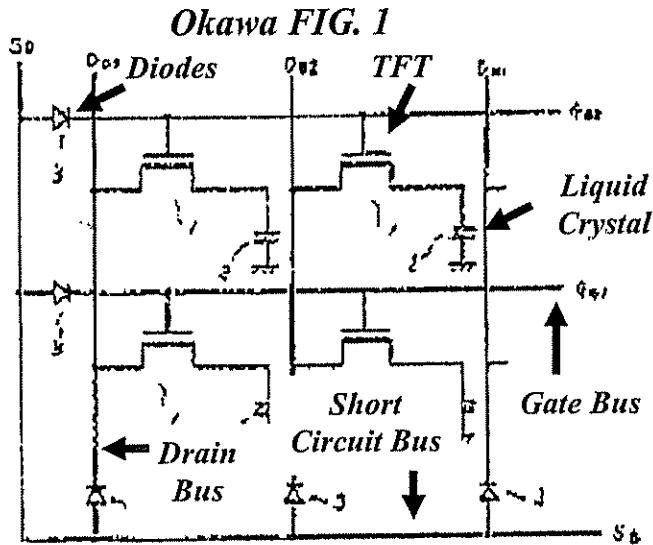
<sup>1</sup> Excerpts of trial transcripts cited herein as "Trial tr. \_\_\_\_" are attached hereto as Ex. A.

<sup>2</sup> In fact, courts have found that semiconductors and conductors are different classes of materials. *See Sperry Rand Corp. v. Texas Instrs. Inc.*, 206 F. Supp. 676 (N.D. Tex. 1962).

*Kuramara*, for example, each use diodes to connect the source lines and gate lines to a guard ring.

**a. Okawa Shows The Use Of Diodes To Connect Gate Lines And Source Lines To A Guard Ring.**

As presented at trial, CPT uses diodes, a type of semiconductor, to connect source lines



and gate lines to a guard ring. *Okawa* also shows the use of diodes to connect gate lines and source lines to a guard ring. Figure 1 of *Okawa* shows a TFT that switches a pixel on and off (1), a display medium such as a liquid crystal (2), a diode with reversible breakdown properties (3) and a drain bus (D<sub>B</sub>), a gate bus (G<sub>B</sub>) and a short-circuit bus (S<sub>B</sub>) line for the prevention of electrostatic destruction.

**b. LPL's "Conduction Band" Argument To Distinguish *Okawa's* Diodes And CPT's Diodes In Implementing Its Guard Ring Technology Is A Distinction Without A Difference.**

In an attempt to evade the prior art, LPL distinguishes *Okawa's* diodes based on *Okawa's* reference to diodes "with reversible breakdown properties." LPL argues that *Okawa's* diodes are different from *REDACTED* based on how they conduct electrical current. LPL does not dispute that *Okawa's* diodes are diodes in every sense of the term.

In LPL's Answering Brief, LPL carefully bases equivalency between "conductors" and "semiconductors" on the basis that they both conduct "in the same way, through their conduction band." (See, e.g., LPL brief at 4.) LPL distinguishes *Okawa* using this "conduction band"

theory, arguing that although *Okawa's* diode conducts, it does not conduct through the conduction band.<sup>3</sup> *This is a distinction without a difference.* The Court's claim construction Order, defining interconnecting as "electrically connecting with conductors," does not limit conduction through a "conduction band." And how the diode conducts bears no relationship to its operation to disperse ESD. As LPL's Dr. Schlam states in supporting equivalency between "conductors" and "semiconductors," "if this didn't conduct ... the guard ring wouldn't work." (Trial tr. at 391:4-5.) Dr. Schlam adds that "conductors" include

**REDACTED**

**REDACTED**

because they both allow electrical charge to move under certain circumstances. (Trial tr. at 396:9-15.) Dr. Schlam admitted *Okawa's* diodes allow charge to move as well. (Trial tr. at 472:17-22.) *Okawa* meets Dr. Schlam's test - literally. If *Okawa's* diodes did not conduct, they would not work. CPT is practicing that which is disclosed in the prior art and therefore cannot infringe under the Doctrine of Equivalents.

**3. CPT's Accused Processes Do Not Meet The "Interconnecting" Limitation Under The Doctrine Of Equivalents Function/Way/Result Test.**

LPL acknowledges that "the doctrine of equivalents was invoked only concerning the element of 'interconnecting.'" (LPL brief at 8.) The parties agree that infringement of the "interconnecting" element under the doctrine of equivalents requires that the accused product perform substantially the same function, in substantially the same way, to achieve substantially the same result as the patent teaches. (LPL brief at 12.)

**a. CPT's Process Does Not Perform A Required Function Of The Interconnecting Limitation.**

In LPL's Answering Brief, LPL asserts that the Doctrine of Equivalents serves an equitable purpose of prohibiting an infringer from "stealing the benefit of an invention." (LPL

---

<sup>3</sup> LPL argues that *Okawa's* diodes move electrical charge by "tunneling" and therefore are not "conductors." (LPL brief at 19.)

brief at 9 (citations omitted)). LPL's assertion begs the question – what is the benefit afforded the public by the '002 patent? Guard ring technology to protect TFT arrays from ESD is not original with Mr. Holmberg. As *Okawa* shows, the use of diodes to connect source lines and gate lines to a guard ring is not new with Mr. Holmberg. Nor is there any evidence that Mr. Holmberg developed the use of diodes that “conduct through a conducting band” to connect source lines and gates lines to a guard ring. The one benefit that LPL refuses to acknowledge is that Mr. Holmberg's particular way of *interconnecting* source lines and gate lines to a guard ring allows for two-point testing.

**(1) CPT's Accused Processes Lack The Two-Point Testing Function.**

---

LPL does not dispute that CPT's accused processes lack the two-point testing function.

Rather, :

**REDACTED**

Holmberg's interconnection scheme permits two-point testing. However, LPL argues, incorrectly, that two-point testing is *not* one of the functions of the “interconnecting” element. (LPL brief at 13.) Rather, LPL asserts that ESD is the *only* function of Holmberg's interconnecting scheme and that CPT is attempting “to redefine the function of ‘interconnecting’ as ‘two-point testing.’” (LPL brief at 13.) CPT is not “redefining” the function, but rather including both functions as required by law. In other words, Holmberg's particular way of “interconnecting” allows for both ESD dispersal *and* two-point testing. Given the state of the prior art, this is the only benefit, if any, that Holmberg's invention has provided to the public.

LPL disputes that determining the function of a claim element requires looking at the specification. *Vehicular Techs. v. Titan Wheel Int'l, Inc.*, 212 F.3d 1377, 1382 (Fed. Cir. 2000); *ATD Corp. v. Lydall, Inc.*, 159 F.3d 534, 544 (Fed. Cir. 1998). In *Vehicular Technologies*, the

Federal Circuit pointed out that the only “conceivable” way that an accused device can lack any of the functions of a claim element *and still infringe under the Doctrine of Equivalents* is for that function to be “insignificant.” 212 F.3d at 1380. Furthermore, *Vehicular Technologies* found that a function mentioned only in the specification could not be ignored. *Id.* at 1382.

Applying the law as in *Vehicular Technologies*, two-point testing clearly is a function of how Holmberg describes interconnecting. Even LPL agrees that two-point testing is not an “insignificant” function, as *Vehicular Technologies* requires if it is to be ignored. (LPL brief at 14.) Nor does LPL dispute that the ‘002 patent specification discusses the two-point testing function by incorporating the ‘222 patent by reference. Moreover, both Scott Holmberg, the ‘002 patent’s inventor, and Young Woo Cho, LPL’s engineer, confirmed that two-point testing is a significant function of the “interconnecting” element. (Trial tr. at 1328:16-1329:7 (Scott Holmberg testimony); 1304:9-1305:6 (Young Woo Cho testimony).)

In support of its position, LPL cites *Procter & Gamble Co. v. Nabisco Brands, Inc.*, 711 F. Supp. 759 (D. Del. 1989), a case that discusses claim construction, but not the determination of the function of a claim element under the Doctrine of Equivalents. Second, LPL cites *Toro Co. v. White Consolidated Indus., Inc.*, 266 F.3d 1367, 1371 (Fed. Cir. 2001). *Toro* supports CPT’s argument that one looks to the specification to determine an element’s functions. *Toro* reiterates *Vehicular Technologies*’ principle that a function must be “insignificant” to be ignored under the Doctrine of Equivalents. *Id.*

LPL also argues that it is unnecessary to look to the ‘222 specification. (LPL brief at 14-15.) This is incorrect. The ‘002 patent explicitly incorporates the ‘222 patent by reference. (LPL brief at 15.) Incorporation by reference makes the referenced document “effectively part of the host document as if it were explicitly contained therein.” *Telemac Cellular Corp. v. Topp*

*Telecom, Inc.*, 247 F.3d 1316, 1329 (Fed. Cir. 2001). LPL's citation to an irrelevant section of the *Manual of Patent Examining Procedure* that concerns the establishment of a patent's filing date cannot trump established Federal Circuit law. *See, e.g., Alacritech, Inc. v. Microsoft Corp.*, No. 04-03284, 2005 WL 850729, at \*6 n.3 (N.D. Cal. Apr. 12, 2005) (explaining that the *Manual of Patent Examining Procedure* by its own terms is not binding authority, nor does it have the force of law).

LPL also argues that "the logical conclusion of CPT's argument [that two-point testing is a function of interconnecting] is that there are no possible equivalents to 'electrically connecting with conductors.'" (LPL brief at 16.) This is incorrect. First, a claim limitation is not required to have "equivalents"; indeed no equivalents to a claim limitation may exist. *See TI Group Automotive Sys. (N.A.), Inc. v. VDO N.A., L.L.C.*, No. 00-432-GMS, 2002 WL 31051602, at \*9 (D. Del. Sept. 4, 2002). Moreover, any structure in which two-point testing can be performed can be an equivalent to the '002 patent's "interconnecting" element. If taking into account the legally-required functions of the element tends to limit the scope of equivalents, that is not a reason to ignore those functions. The Federal Circuit has placed limits such as this on the doctrine of equivalents precisely so that the doctrine will not impede the public notice function of a patent. *See Nystrom v. Trex Co.*, 424 F.3d 1136, 1142-43 (Fed. Cir. 2005).

**(2) LPL Misled The Jury Into Ignoring The Testing Function.**

---

LPL does not dispute that its counsel and its expert, Dr. Schlam, urged the jury (contrary to the law) that the specification should not be consulted in determining an element's function and that only the claim language should be consulted.<sup>4</sup> (Trial tr. at 479:5-480:2; 2206:2-9.)

---

<sup>4</sup> Despite LPL's assertion that Dr. Schlam read the '222 patent, which is part of the specification of the '002 patent, Dr. Schlam himself testified that he merely "glanced at it

Instead, LPL argues that “Defendants cannot show that [LPL’s instructions to the jury to ignore the specification in determining the function of interconnecting] caused the jury to disregard the evidence presented.” (LPL brief at 13.) To the contrary, the jury clearly ignored the specification in applying the Doctrine of Equivalents. This decision was contrary to law.

**b. CPT’s Accused Products Perform The ESD Dispersion Function Of The Interconnecting Element In A Different Way Than The Patent Teaches.**

CPT’s accused products do not perform the function of ESD dispersion (which the parties agree is one of the functions of the element) the same way that the patent discloses.<sup>5</sup> As explained in CPT’s opening brief, LPL’s expert Dr. Schlam testified that the ‘002 patent’s way of dispersing ESD is to disperse the built-up charge through all the interconnected row (or column) lines. (Trial tr. at 395:16-396:8.) As the ‘002 patent describes, substantially all of the gate lines and substantially all of the row lines are interconnected all the time. (Trial tr. at 395:16-396:8.) In contrast,

REDACTED

---

quickly” and “looked at the title page.” (Trial tr. at 476:4-477:16.) Thus, the ‘222 patent could not have informed his doctrine of equivalents analysis.

<sup>5</sup> In its brief, LPL abandons Dr. Schlam’s identification of the function of interconnecting as simply “interconnecting.” Instead, LPL focuses on Dr. Schlam’s identification of the ESD dispersion function. (LPL brief at 13.)

LPL argues that CPT's assertion is new and therefore cannot be raised in post-trial briefing for the first time. (LPL brief at 17.) This is incorrect. LPL acknowledges that "CPT's expert, Dr. Howard, testified that [there is a] lack of simultaneous interconnecting with conductors." (LPL brief at 17.) In addition,

**REDACTED**

(See Trial tr. at 1493:7-1495:7; 1662:5-20; 1684:9-1685:15; 1735:5-21.) Thus, CPT did in fact argue this difference between the '002 patent and the accused products in its closing argument. (See Trial tr. at 2133:18-2134:7.)

LPL incorrectly argues that CPT's products disperse ESD in the same way taught in the '002 patent because both the accused products and the patent disperse ESD by "creating an electrical conduction path for the purpose of dispersing charge." (LPL brief at 16.) This makes the "way" ("creating an electrical conduction path") the same as the "function." There must always be a path to move the charge. Therefore, LPL's definition of the "way" eliminates the "way" requirement because it is automatically satisfied when the "function" requirement is satisfied. This is contrary to the law. *See Insituform Techs., Inc. v. Cat Contracting, Inc.*, 161 F.3d 688, 693-94 (Fed. Cir. 1998) (holding that "function," "way" and "result" are separate requirements that must not be collapsed together). Properly analyzed, the way taught by the patent is establishing a conductive path through the entire array by which the electrical charge can be dispersed throughout the entire array. (Trial tr. at 2133:18-2134:7.) In contrast, the way the accused products disperse electrical charge is

**REDACTED**

**4. There Can Be No Infringement Even If The “Function, Way, Result” Test Is Not Used To Guide The Insubstantial Difference Inquiry.**

Courts sometimes conduct the insubstantial difference inquiry independently of the function, way, result test. *See, e.g., Lighting World, Inc. v. Birchwood Lighting, Inc.*, 382 F.3d 1354, 1357 (Fed. Cir. 2004). LPL argues CPT’s semiconductor-containing diodes conduct when there is a sufficient voltage present to turn them on and that semiconductors and conductors “both conduct through their conduction band.” (LPL brief at 10.) Such an argument incorrectly frames the issue as whether the physics of free electron movement is the same in conductors and semiconductors. The correct issue for consideration is whether the claim element at issue is equivalent to what is found in the accused products – *i.e.*, whether

**REDACTED**

to “electrically connecting with conductors.” *See*

**REDACTED**

*Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 40 (1997). Properly framed, the movement of electrical charge in the accused products happens in different places and under different conditions than movement of charge in the ‘002 patent. Thus, there are indeed substantial differences between the patent and the accused products.

Another factor in the insubstantial difference inquiry is whether or not the claim element is interchangeable with what is used in the accused product. *See Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc.*, 424 F.3d 1293, 1317 (Fed. Cir. 2005). Mr. Holmberg and Dr. Schlam agree that semiconductors are not interchangeable with conductors, particularly in the context of LCD displays and thin film transistors. (Trial tr. at 493:6-14; 1406:14-18.) LPL’s assertion that CPT incorrectly argues the non-interchangeability of semiconductors and conductors is wrong.

**B. The “Via a Resistance” Limitation Of Claims 1 and 8 Are Not Met By CPT’s Accused Process.**

There is no evidence in the record that supports a finding that **REDACTED** literally infringe this element. The Court defines via a “resistance” as “a circuit component that has a specified resistance to the flow of electric current and is used to minimize the current surge from an electrostatic discharge.”<sup>6</sup> (D.I. 218, Claim Construction Order at 4.) LPL asserts that CPT is arguing that a “specified resistance” means “resistor” (an argument the Court has rejected). (LPL brief at 22.) This is not CPT’s argument. A constant resistance is a broader category than a resistor. In fact, as Dr. Schlam testified, many things, not just resistors, have a constant resistance. (Trial tr. at 505:13-14 (Dr. Schlam testifying that “I can measure the resistance of your clothing.”).)

LPL continues to assert that the “specified resistance” required by the claims can be the

**REDACTED** (LPL brief at 23.) LPL’s major support for its argument is a misleading citation to Dr. Schlam’s testimony at page 508 of the trial transcript, where Dr. Schlam says that “[i]f you knew the exact geometry, **REDACTED** you would be able to calculate the resistance.” (Emphasis added.) But Dr. Schlam also indicated that it is *not possible to know the exact geometry* **REDACTED** and thus, it is not possible to specify its resistance. (Trial tr. at 508:8-20; 408:2-22) (Dr. Schlam testifying that “[i]t’s really hard to say what the actual resistance **REDACTED** would be. ... you really can’t say what that resistance is.”). Thus, the **REDACTED** cannot be called a “specified resistance.”

Furthermore, an assertion that

**REDACTED** contradicts the claim language, which says that the “resistance” couples the interconnected gate lines and interconnected source lines to the guard ring. **REDACTED** couple the

<sup>6</sup> Scott Holmberg, the inventor of the ‘002 patent, effectively admitted that he never intended his invention to cover the **REDACTED** (See Trial tr. at 1326:3-18.)

interconnected gate lines and interconnected source lines to the guard ring; rather, as Dr. Howard testified,

**REDACTED**

LPL argues that CPT's documents referring to

**REDACTED**

But

variable is not "specified." Thus, this does not meet the Court's definition of "a circuit component that has a specified resistance to the flow of electric current and is used to minimize the current surge from an electrostatic discharge." (D.I. 218, Claim Construction Order at 4.)

LPL also refers to other

**REDACTED**

LPL also complains of CPT's reading of the Court's claim construction requiring "resistance" to "minimize the current surge from an electrostatic discharge." LPL argues the

Court did not mean that the current surge *through the resistance* is minimized. (LPL brief at 25.) Instead, LPL argues that Court meant that the current surge *in some other unspecified place* is minimized. (LPL brief at 25.) This is a stretch. The Court construed “via a resistance” to require minimizing the current surge through the resistor because that is precisely what the ‘002 patent discloses. (*See* Trial tr. at 1541:6.) The purpose of a resistance is to reduce, or resist, current. The ‘002 patent teaches the placement of a resistor between the substantially all connected gate (and source) lines and the guard ring to reduce, or minimize, the current that flows there. (*See* Trial tr. at 1541:6.)

**REDACTED**

LPL misleadingly cites Dr. Howard’s testimony at another point. (LPL brief at 25.) Dr. Howard testified that

**REDACTED**

For each of the above reasons, no reasonable jury could have found that the accused products meet the “via a resistance” limitation.

## **II. INVALIDITY.**

LPL claims that Dr. Howard conceded validity, preventing the Court’s consideration of the issue. (LPL brief at 26.) Dr. Howard’s testimony was actually that if the asserted claims are correctly interpreted such that the accused products do not infringe, then the prior art would not

contain certain elements of the claims. (Trial tr. at 1516:10-13; 1606:6-9; 1632:24-1633:4; 1724:10-18.) Dr. Howard did not “admit novelty.” (See LPL brief at 26.) Rather, he testified that if the asserted claims are stretched to cover the accused processes, then they are invalid as anticipated and as obvious. (Trial tr. at 1516:10-13; 1606:6-9; 1632:24-1633:4; 1724:10-18.)

**A. The *Okawa* Reference Anticipates Claim 1.**

**1. *Okawa* Teaches Using Diodes Like Those In CPT’s Products.**

As discussed above,

**REDACTED**

**2. *Okawa* Teaches The Removal Of The Outer Guard Ring.**

LPL argues that *Okawa* “teaches away” from removal of the guard ring because *Okawa* mentions removal only in its discussion of the prior art. (LPL brief at 27.) Whether a reference ‘teaches away’ from the invention is inapplicable to an anticipation analysis.” *Celeritas Techs., Ltd. v. Rockwell Int’l. Corp.*, 150 F.3d 1354, 1361 (Fed. Cir. 1998). Moreover, as is evident from *Okawa*, removal of guard rings *was well known* by the time *Okawa* was published. One of ordinary skill in the art who reads *Okawa* would know that the outer guard ring is removed after completing the manufacturing process. (Trial tr. at 1715:12-14.) Even if a piece of prior art does not expressly disclose a limitation, it anticipates if a person of ordinary skill in the art would understand the prior art to disclose the limitation and could combine the prior art description with his own knowledge to make the claimed invention. *Helifix Ltd. v. Blok-Lok, Ltd.*, 208 F.3d 1339, 1347 (Fed. Cir. 2000). Moreover, the law clearly allows combining a patent’s discussion of the prior art with its description of the invention, as the anticipation analysis requires examining the entire reference at issue. *Standard Havens Prods., Inc. v. Gencor Indus., Inc.*, 953 F.2d 1360, 1369 (Fed. Cir. 1991). Anticipation is determined by what one of ordinary skill in the

art would understand to be in the reference, either explicitly or implicitly. *Advanced Display Sys., Inc. v. Kent State Univ.*, 212 F.3d 1272, 1282 (Fed. Cir. 2000).

LPL cites *Applera Corp. v. Micromass UK Ltd.*, 204 F. Supp. 2d 724, 752 (D. Del. 2002), as support for its argument that it is improper to combine *Okawa*'s description of the prior art with its description of the claimed invention. (LPL brief at 28.) The *Applera* court held, however, that combining different embodiments in a prior art reference to find anticipation *is permitted* if such a combination would have been suggested to one of skill in the art. *Id.* at 752. *Okawa* discloses guard ring removal. *Okawa* anticipates Claim 1.

**B. The Kawamura Reference Anticipates Claim 1.**

**1. Kawamura Is Prior Art.**

Mr. Holmberg's testimony as "proof" of conception prior to the publication of the *Kawamura* reference is uncorroborated. (LPL brief at 30-32.) An inventor's testimony that he conceived his invention prior to the filing date of his patent application, standing alone, is insufficient to prove conception. *Mahurkar v. C.R. Bard, Inc.*, 79 F.3d 1572, 1577 (Fed. Cir. 1996). Corroborating evidence in the form of a contemporaneous writing or other disclosure that would enable one skilled in the art to make the invention must be presented. *Burroughs Wellcome Co. v. Barr Labs., Inc.*, 40 F.3d 1223, 1228 (Fed. Cir. 1994).

LPL has failed to present the required corroborating evidence of pre-filing date conception. Scott Holmberg testified that he and his colleagues tested the invention prior to the '002 filing date. However, LPL produced no one in discovery or at trial. Instead, LPL argues Mr. Holmberg's May 1988 meeting with his patent attorney, Mr. Winburn, is sufficient proof of

conception. (LPL brief at 31-32.) LPL cites no authority for this proposition. There is no evidence of the substance of the meeting. It is inadequate proof of conception.<sup>7</sup>

PTX 130, a Honeywell document, is referenced by LPL as corroborating evidence of Mr. Holmberg's pre-filing conception date. (LPL brief at 33.) PTX 130 is improper evidence of corroboration. There was absolutely *no* reference to PTX 130 until LPL's counsel moved it into evidence. LPL explained none of the contents or the relevance of PTX 130 through witnesses or otherwise.<sup>8</sup> Had the document been analyzed, the jury would have learned that PTX 130 relates to a 1 inch by 1.475 inch array, which Mr. Holmberg verified several times was an *inner guard ring only* product. (See Trial tr. at 1389:18-1390:6; 1364:22-25; 544:14-20.) LPL's expert conceded that inner guard rings were known in the prior art. (Trial tr. at 1981:16-18.) Thus, PTX 130 cannot corroborate the conception of claims 1 (a claim for an outer guard ring only structure) and 8 (a claim for the combination of an outer guard ring with an inner guard ring).

The jury should not be permitted to rely on LPL's prejudicial and unsubstantiated statements during closing argument regarding the date of invention, and a new trial should be ordered to determine the validity of the '002 patent.

---

<sup>7</sup> Understandably, LPL failed to mention that Mr. Winburn was the attorney of record on several of Mr. Holmberg's other patents that were pending at the time, any of which could have been the subject of the May 1988 meeting. But even taking as true LPL's unsubstantiated assertion that Mr. Holmberg discussed the '002 invention with Mr. Winburn in May 1988, it is important to keep in mind that the invention underwent substantial changes between the initial meeting and the filing of the application.

<sup>8</sup> LPL cites *Gamma-Metrics Inc. v. Scantech Ltd.*, 52 U.S.P.Q.2d 1578, 1584 (S.D. Cal. 1998), for the proposition that CPT has the burden to disprove every unsubstantiated allegation of pre-filing conception made by LPL. What LPL fails to mention is that the *Gamma-Metrics* court required the patentee to make an affirmative showing as to how the evidence corroborated the inventor's testimony before the defendant had to disprove anything. *Id.* at 1585. Neither *Gamma-Metrics* nor any other case supports the proposition that an inventor's testimony may be corroborated by merely slipping the document into evidence and ignoring it until closing argument (which is precisely what LPL has done in this case).

2. **Kawamura Employs Removable Outer Guard Rings.**

LPL argues that *Kawamura* does not render the '002 patent invalid because it does not disclose outer ESD guard rings, but rather depicts the guard ring "inside the contact pads." (LPL brief at 29.) Outer ESD guard rings were well known when *Kawamura* was published. Indeed, the exact placement of the guard ring is irrelevant to the functionality of the ring. (See Trial tr. at 1718:13-17; 1993:2-16.) LPL's placement argument does not counter *Kawamura*'s anticipation of Claim 1. One of ordinary skill in the art reading the *Kawamura* reference would have understood that the reference could be used with either an inner or outer guard ring. (Trial tr. at 1718:13-17.) Thus, *Kawamura* anticipates claim 1.

C. **Claim 8 Is Obvious.**

1. **It Would Have Been Obvious To Combine Inner And Outer ESD Guard Rings.**

As explained above, claim 1 of the '002 patent is anticipated by both *Okawa* and *Kawamura* independently. Moreover, LPL's expert admitted that inner guard rings were known in the prior art at the time of the application for the '002 patent. (See Trial tr. at 1981:16-18.) Claim 8, which adds an inner guard ring to the outer guard ring of claim 1, combines two old and known components, the inner and outer guard rings.

Dr. Schlam repeatedly testified that combining an inner and outer ESD guard ring would be as obvious as combining a raincoat with an umbrella on a rainy day. (Trial tr. at 1972:5-1973:20.) He also testified that combining an inner and outer guard ring is "something that's quite obvious in the world of electronics." (Trial tr. at 1650:1-3.) Those of ordinary skill knew that use of both inner and outer guard rings provides more protection than the use of an inner or outer guard ring alone. (See Trial tr. at 1973:17-20.) Thus, one skilled in the art would have the

motivation to combine the outer ring and inner ring prior art references. (Trial tr. at 1641:19-1642:9.) Claim 8 is obvious in view of the prior art.

**2. LPL's Secondary Considerations Of Non-Obviousness Do Not Apply.**

In closing argument, LPL's counsel stated that "Chunghwa has to have looked at the '002 patent, we told them about it ... [t]hey presented no witnesses to you that says we didn't look at the '002 patent ... Dr. Howard told you there is all these internet searches. They probably printed this out right after the February meeting, or the February letter I should say." (Trial tr. at 2062:1-11.) No nexus was provided between the '002 patent and CPT's process employing diodes. As discussed above, diodes are not shown in the '002 patent for connecting source lines and gate lines to an outer guard ring. Indeed, diodes for this purpose are shown in the prior art, for example by *Okawa*. LPL's copying assertion is pure speculation and cannot be considered as a secondary consideration of non-obviousness.

"Evidence of commercial success, or other secondary considerations, is only significant if there is a nexus between the claimed invention and the commercial success." *Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1311-12 (Fed. Cir. 2006). LPL referenced Mr. Ho Lee's testimony that he believed everyone in the industry used the '002 technology as a basis for alleging commercial success. Guard ring technology was known before Mr. Holmberg's invention, as is discussed above. Moreover, Mr. Ho Lee's statement that everyone in the industry used the technology was his personal speculation. During trial, Mr. Lee testified that his basis for his statement that everyone in the industry uses the '002 patent was not based on an infringement analysis. (Trial tr. 648:10-18) ("infringement has to do with the legal aspects and so I cannot say. I cannot talk about that.").

The only evidence asserted by LPL on long-felt need was again the testimony of Mr. Ho Lee, testifying that ESD was a problem that he solved when he came across the '002 patent. (Trial tr. at 2076:14-23.) That is not evidence of long-felt need.

**CONCLUSION**

For the foregoing reasons, CPT respectfully requests that the Court grant judgment of noninfringement and invalidity of the '002 patent as a matter of law, or in the alternative, grant a new trial.

OF COUNSEL:

Teresa M. Corbin  
 Glenn W. Rhodes  
 Howrey LLP  
 525 Market Street, Suite 3600  
 San Francisco, California 94105  
 (415) 848-4900

Julie S. Gabler  
 Howrey LLP  
 550 South Hope Street, Suite 1100  
 Los Angeles, California 90071  
 (213) 892-1800

  
 Robert W. Whetzel (#2288)  
 whetzel@rlf.com  
 Steven J. Fineman (#4025)  
 fineman@rlf.com  
 Matthew W. King (#4566)  
 king@rlf.com  
 Richards, Layton & Finger  
 One Rodney Square, P.O. Box 551  
 Wilmington, DE 19899  
 (302) 651-7700  
 Attorneys for Defendants/Counterclaimants  
 Tatung Company, Tatung Company of  
 America, Chunghwa Picture Tubes, Ltd, and  
 ViewSonic Corporation

Dated: October 30, 2006

UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

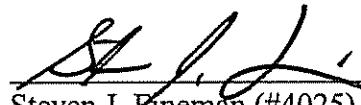
**CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that on October 30, 2006, I electronically filed the foregoing document with the Clerk of Court using CM/ECF which will send notification of such filing, and hand delivered to the following:

Richard D. Kirk  
The Bayard Firm  
222 Delaware Avenue, Suite 900  
P.O. Box 25130  
Wilmington, DE 19899

I hereby certify that on October 30, 2006, I sent the foregoing document by electronic mail, to the following non-registered participants:

Gaspare J. Bono  
Matthew T. Bailey  
Andrew J. Park  
Adrian Mollo  
McKenna Long & Aldridge LLP  
1900 K Street, NW  
Washington, DC 20006



\_\_\_\_\_  
Steven J. Fineman (#4025)  
Fineman@rlf.com  
Richards, Layton & Finger  
One Rodney Square  
P.O. Box 551  
Wilmington, DE 19899

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

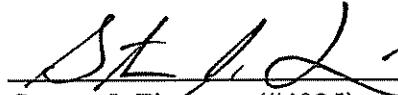
**CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that on December 21, 2006, I electronically filed the foregoing document with the Clerk of Court using CM/ECF, which will send notification of such filing to, and also hand delivered same to:

Richard D. Kirk, Esquire  
The Bayard Firm  
222 Delaware Avenue, Suite 900  
Wilmington, DE 19899

I HEREBY CERTIFY that on December 21, 2006, I caused the foregoing document to be served by Federal Express to the following non-registered participants:

Gaspare J. Bono, Esquire  
McKenna Long & Aldridge LLP  
1900 K Street, NW  
Washington, DC 20006

  
\_\_\_\_\_  
Steven J. Fineman (#4025)  
fineman@rlf.com  
Richards, Layton & Finger  
One Rodney Square  
PO Box 551  
Wilmington, DE 19899